AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for biostimulating a target region of a subject, comprising:

irradiating the target region with a radiation, generated by a radiation source to have at least one selected wavelength component suitable for biostimulation, for a selected time duration, said time duration being chosen so as to cause biostimulation of said target region, and

controlling a temperature of said irradiated target region with a set of one or more sources ~~source~~ independent of said biostimulating radiation so as to modulate efficacy of said biostimulation, wherein controlling the temperature comprises heating a first selected portion of the target region and cooling a second selected portion of the target region.

2. (Original) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 380 nm to about 1250 nm.

3. (Original) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 380 nm to about 600 nm.

4. (Original) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 380 nm to about 450 nm.

5. (Original) The method of claim 1, further comprising selecting said wavelength component to be in range of about 600 nm to about 700 nm.

6. (Original) The method of claim 1, further comprising selecting said wavelength component to be in a range of about 760 nm to 880 nm.

7. (Original) The method of claim 1, wherein said radiation source generates radiation with a narrow bandwidth.

8. (Original) The method of claim 7, wherein said narrow bandwidth is less than about 100 nm.

9. (Original) The method of claim 1, further comprising selecting said time duration to be in a range of about 10 seconds to about one hour.

10. (Original) The method of claim 1, further comprising selecting said time duration to be in a range of about 10 minutes to about one hour.

11. (Original) The method of claim 1, wherein said radiation delivers a power flux in a range of about 1 to about 250 mW/cm^2 to said target region.

12. (Original) The method of claim 1, wherein said radiation delivers a power flux in a range of about 10 to about 100 mW/cm^2 to said target region.

13. (Original) The method of claim 1, wherein said radiation delivers an energy flux in a range of about 1 $Joule/cm^2$ to about 1000 $Joules/cm^2$ to said irradiated target region during said time duration.

14. (Original) The method of claim 1, wherein said radiation delivers an energy flux in a range of about 1 $Joule/cm^2$ to about 100 $Joules/cm^2$ to said irradiated target region during said time duration.

15. (Original) The method of claim 1, wherein irradiating said target region comprises exposing said target region to a beam of radiation having a cross-sectional area in a range of about 1 cm^2 to about 200 cm^2.

16. (Currently amended) The method of claim 1, wherein ~~the step of controlling temperature comprises~~ heating said ~~irradiated~~ first selected portion of the target region ~~so as to~~ increases efficacy of said biostimulation.

17. (Original) The method of claim 16, wherein said heating step is selected from the group consisting of contact heating, convection, and application of electromagnetic radiation.

18. (Original) The method of claim 16, wherein said heating step comprises applying ultrasound to said irradiated target region.

19. (Original) The method of claim 16, wherein said heating step comprises applying microwave radiation to said irradiated target region.

20. (Original) The method of claim 16, wherein said heating raises the temperature of said target region to a value in a range of about 37°C to about 50°C.

21. (Original) The method of claim 16, wherein said heating raises the temperature of said target region to a value in a range of about 37°C to about 45°C.

22. (Original) The method of claim 16, wherein said heating raises the temperature of said target region to a value in a range of about 37°C to about 42°C.

23. (Currently amended) The method of claim 1, wherein ~~the step of controlling temperature comprises~~ cooling said second selected portion of the target region ~~to~~ decreases efficacy of said biostimulation.

24. (Original) The method of claim 23, wherein said cooling lowers the temperature of said target region to a value in a range of abut 0°C to about 36°C.

25. (Original) The method of claim 23, wherein said cooling lowers the temperature of said target region to a value in a range of about 15°C to about 36°C.

26. (Currently Amended) The method of claim 1, wherein a first source of the set provides heating for said first portion and a second source of the set provides cooling for said second portion ~~controlling the temperature comprises utilizing a separate radiation source to heat said target region irradiated with biostimulating radiation~~.

27. (Currently Amended) The method of claim 1, ~~26~~, wherein said ~~separate radiation source~~ set comprises a narrowband source to provide heating.

28. (Currently Amended) The method of claim 1, ~~26~~, wherein said ~~separate radiation source~~ set comprises a broadband source to provide heating.

29. (Currently Amended) The method of claim 1, ~~26~~, wherein said ~~separate radiation source~~ set comprises a source configured to generate ~~generates~~ radiation having one or more wavelength components in a range of about 380 nm to about 2700 nm.

30. (Currently Amended) The method of claim 1, ~~26~~, wherein said ~~separate radiation source~~ set comprises a source configured to generate ~~generates~~ radiation having one or more wavelength components in a range of about 1000 nm to about 1250 nm.

31. (Currently Amended) The method of claim 1, ~~26~~, wherein said ~~separate radiation source~~ set comprises a source configured to generate ~~generates~~ radiation having one or more wavelength components in a range of about 700 nm to about 900 nm.

32. (Currently Amended) The method of claim 1, wherein controlling the temperature comprises placing said target region in thermal ~~contact~~ communication with a surface having a selected temperature.

33. (Original) The method of claim 1, wherein controlling the temperature comprises generating a flow of a fluid over said target region to be in thermal contact therewith.

34. (Original) The method of claim 1, wherein controlling the temperature comprises applying a vaporizing cream to said target region.

35. (Original) The method of claim 1, wherein said target region is disposed at a depth below a skin surface of the subject.

36. (Currently Amended) The method of claim 1, wherein said first and second portions overlap. ~~the step of controlling the temperature comprises heating a first selected portion of the target region and cooling a second selected portion of the target region.~~

37. (Currently amended) The method of claim ~~36~~ 1, wherein the heating and cooling steps are simultaneous.

38. (Currently amended) The method of claim ~~36~~ 1, wherein the heating and cooling step are sequential.

39. (Currently amended) A method of biostimulating a target region of a ~~patient~~ tissue disposed at a depth below a surface of the tissue ~~the patient's skin~~, comprising:

~~exposing a portion of the patient's skin for a selected time duration to a radiation having at least one wavelength component capable of penetrating to a depth associated with said target region so as to~~ irradiating said target region with radiation~~, said wavelength component and said time duration being~~ chosen to cause biostimulation within said target region, and

controlling a temperature of a volume of said ~~patient~~ tissue through at least a portion of which said radiation traverses to reach said target region ~~so as to modulate biostimulation within said volume relative to said target region~~, wherein controlling the temperature comprises heating a first portion of said volume and cooling a second portion of said volume.

40. (Currently amended) The method of claim 39, wherein ~~controlling the temperature comprises~~ cooling said second portion of said volume ~~to~~ decreases biostimulation therein.

41. (Original) The method of claim 39, wherein said cooling lowers a temperature of said volume to a value in a range of about 0°C to about 36°C.

42. (Original) The method of claim 39, wherein said cooling lowers a temperature of said volume to a value in a range of about 15°C to about 36°C.

43. (Currently Amended) The method of claim 39, wherein cooling said volume comprises cooling a portion of a ~~the~~ patient's skin in proximity of said volume.

44. (Currently Amended) The method of claim 39, further comprising selecting said radiation to have a wavelength component to be in a range of about 380 nm to about 1250 nm.

45. (Currently Amended) The method of claim 39, further comprising selecting said radiation to have a wavelength component to be in a range of about 380 nm to about 600 nm.

46. (Currently Amended) The method of claim 39, further comprising selecting said radiation to have a wavelength component to be in a range of about 380 nm to about 450 nm.

47. (Currently Amended) The method of claim 39, further comprising selecting said radiation to have a wavelength component to be in a range of about 600 nm to about 700 nm.

48. (Currently amended) A device for biostimulating a ~~patient's~~ target region of tissue, comprising:

a first source for generating electromagnetic radiation having one or more wavelength components suitable for causing biostimulation in said target region~~,~~

~~a radiation guidance device optically coupled to said source for delivering~~ and configured to deliver said radiation to the target region, ~~and~~

a second source configured to be in thermal communication with said target region for controlling a temperature of said target region in order to modulate efficacy of biostimulation caused by said electromagnetic radiation, the second source configured to heat a first portion of the target region, and

a cooler configured to be in thermal communication with said target region and configured to cool a second portion of the target region.

49. (Currently Amended) The device of claim 48, wherein said first and second portions overlap ~~source generates radiation having a bandwidth less than about 100 nm~~.

50. (Original) The device of claim 48, wherein said first source generates a substantially monochromatic radiation.

51. (Original) The device of claim 48, wherein said first source generates radiation having one or more wavelength components in a range of about 380 nm to about 1250 nm.

52. (Original) The device of claim 48, wherein said second source comprises a source of electromagnetic radiation generating radiation suitable for heating said target region so as to enhance the efficacy of biostimulation.

53. (Original) The device of claim 52, wherein said second source generates radiation having one or more wavelength components in a range of about 380 nm to about 2700 nm.

54. (Currently Amended) The device of claim 48 ~~52~~, further comprising a radiation guidance device optically coupled to said source for delivering said radiation to the target region, wherein the radiation guidance device comprises a lens system for delivering the biostimulating radiation from the first source to the target region.

55. (Currently Amended) The device of claim 54 ~~52~~, wherein said lens system comprises a Fresnel lens.

56. (Currently Amended) The device of claim 54 ~~52~~, further comprising an optical fiber coupled at an input thereof to said first radiation source and an output thereof to said lens system so as to direct light generated by said radiation source to said lens system.

57. (Currently Amended) The device of claim 54 ~~52~~, wherein said lens system comprises at least one movable lens to allow adjusting a cross-sectional area of a radiation beam generated by said first source for irradiating said target region.

58. (Currently Amended) The device of claim 48, further comprising a radiation guidance device optically coupled to said source for delivering said radiation to the target region ~~wherein said radiation guidance device comprises~~

~~a beam splitter adapted to receive a radiation beam from said first source in order to generate a plurality of beam portions, and~~

~~one or more reflective surfaces optically coupled to said beam splitter to direct one or more of said beam portions to a surface of the patient's skin said tissue so as to irradiate said target region~~.

59. (Currently Amended) The device of claim 58, wherein said radiation guidance device comprises

a beam splitter adapted to receive a radiation beam from said first source in order to generate a plurality of beam portions, and

one or more reflective surfaces optically coupled to said beam splitter to direct one or more of said beam portions to a surface of said tissue so as to irradiate said target region ~~said reflective surfaces allow a substantially uniform illumination of said skin surface~~.

60. (Original) The device of claim 58, wherein said beam splitter comprises a prism.

61. (Original) The device of claim 58, wherein at least one of said reflective surfaces exhibits a curved profile.

62. (Currently Amended) A method of biostimulating a ~~subject's~~ target region of tissue, comprising:

irradiating the target region with radiation ~~having one or more wavelength components~~ suitable for causing biostimulation within said target region, and

actively controlling a temperature of at least a portion of said target region to ensure it remains within a pre-defined range of an operating temperature in order to modulate efficacy of biostimulation with said target region, wherein actively controlling the temperature comprises heating a first portion of the target region and cooling a second portion of the target region.

63. (Currently Amended) The method of claim 62, wherein the step of actively controlling the temperature comprises measuring a temperature of a portion of the surface of the tissue ~~patient's skin~~ in thermal contact with said target region.

64. (Original) The method of claim 63, wherein the step of actively controlling the temperature comprises comparing said measured temperature with at least one pre-defined threshold.

65. (Original) The method of claim 64, wherein the step of actively controlling the temperature comprises modifying an amount of heat delivered to or extracted from said target region in response to said comparison of the measured temperature with the pre-defined threshold.

66. (Currently amended) A method for biostimulating a plurality of target regions of a subject, comprising

moving a radiation source over a portion of the subject's skin so as to irradiate sequentially a plurality of target regions with radiation having at least one wavelength component suitable for causing biostimulation, said moving of said radiation source being performed at a rate selected to expose each of said regions to sufficient radiation for causing biostimulation within that region, and

controlling temperature of said target regions by a source independent of said biostimulating radiation so as to modulate efficacy of biostimulation within each of said target regions, wherein controlling temperature comprises heating a first portion of at least one target region and cooling a second portion of at least one target region.

67. (Original) The method of claim 66, further comprising moving the radiation source continuously over said skin portion.

68. (Original) The method of claim 66, further comprising moving the radiation source at least twice over said skin portion.